

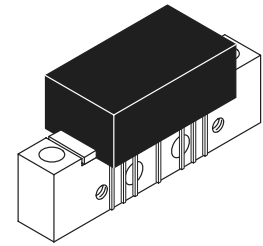
[查询"MHW8185LR_D"供应商](#)
The RF Line

High Output Power Doubler 870 MHz CATV Amplifier

- Specified for 77, 110 and 128-Channel Performance
- Broadband Power Gain — @ $f = 40\text{--}870\text{ MHz}$
 $G_p = 19.4\text{ dB (Typ)}$
- Lower DC Current Consumption
- Superior DC Current Stability with Temperature

MHW8185LR

**19.4 dB GAIN
870 MHz
128-CHANNEL
CATV AMPLIFIER**



CASE 714Y-03, STYLE 2

MAXIMUM RATINGS

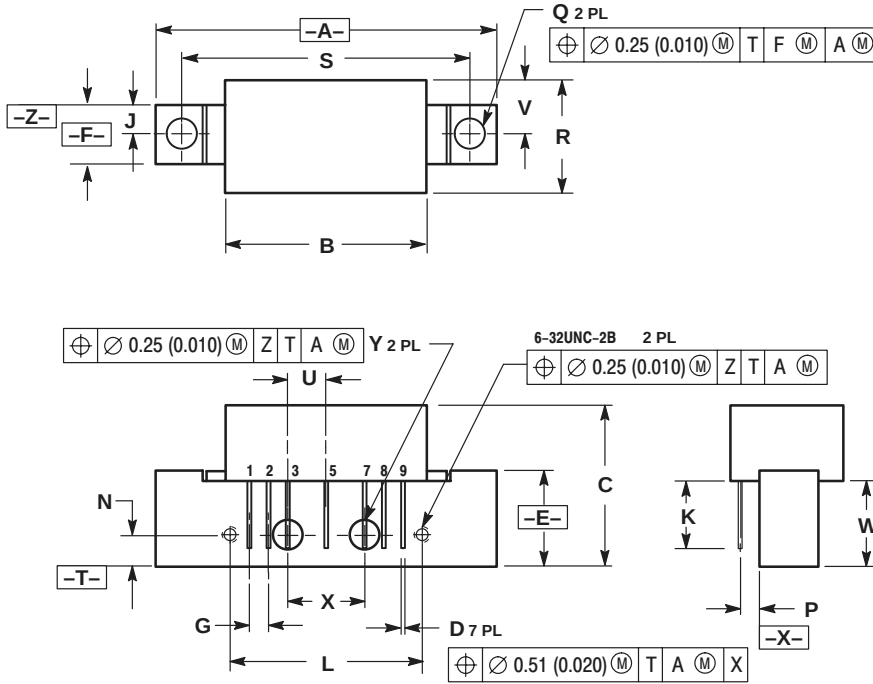
Rating	Symbol	Value	Unit
RF Voltage Input (Single Tone)	V_{in}	+70	dBmV
DC Supply Voltage	V_{CC}	+28	Vdc
Operating Case Temperature Range	T_C	-20 to +100	°C
Storage Temperature Range	T_{stg}	-40 to +100	°C

ELECTRICAL CHARACTERISTICS ($V_{CC} = 24\text{ Vdc}$, $T_C = +30^\circ\text{C}$, 75 Ω system unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	40	—	870	MHz
Power Gain 50 MHz 870 MHz	G_p	18 19	18.5 19.4	19 20.5	dB
Slope 40-870 MHz	S	0.4	0.9	1.4	dB
Gain Flatness (40-870 MHz, Peak-to-Valley)	—	—	0.3	0.8	dB
Return Loss — Input/Output ($Z_0 = 75\text{ Ohms}$) @ $f > 40\text{ MHz}$ (Derate)	IRL/ORL	20 —	— —	— 0.007	dB dB/MHz
Composite Second Order ($V_{out} = +40\text{ dBmV/ch.}$, Worst Case) 128-Channel FLAT ($V_{out} = +44\text{ dBmV/ch.}$, Worst Case) 110-Channel FLAT ($V_{out} = +44\text{ dBmV/ch.}$, Worst Case) 77-Channel FLAT	CSO_{128} CSO_{110} CSO_{77}	— — —	-69 -70 -85	-62 -64 -68	dBc
Cross Modulation Distortion @ Ch 2 ($V_{out} = +40\text{ dBmV/ch.}$, FM = 55 MHz) 128-Channel FLAT ($V_{out} = +44\text{ dBmV/ch.}$, FM = 55 MHz) 110-Channel FLAT ($V_{out} = +44\text{ dBmV/ch.}$, FM = 55 MHz) 77-Channel FLAT	XMD_{128} XMD_{110} XMD_{77}	— — —	-72 -66 -69	-64 -63 -67	dBc
Composite Triple Beat ($V_{out} = +40\text{ dBmV/ch.}$, Worst Case) 128-Channel FLAT ($V_{out} = +44\text{ dBmV/ch.}$, Worst Case) 110-Channel FLAT ($V_{out} = +44\text{ dBmV/ch.}$, Worst Case) 77-Channel FLAT	CTB_{128} CTB_{110} CTB_{77}	— — —	-66 -63 -70	-63 -61 -68	dBc
Noise Figure 50 MHz 550 MHz 750 MHz 870 MHz	NF	— — — —	5.3 5.8 6.6 7.8	6.2 — — 8.5	dB
DC Current ($V_{DC} = 24\text{ V}$, $T_C = -20\text{ to }+100^\circ\text{C}$)	I_{DC}	345	365	385	mA

PACKAGE DIMENSIONS

查询"MHW8185LR_D"供应商



NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	----	1.775	----	45.08
B	----	1.085	----	27.56
C	----	0.840	----	21.34
D	0.018	0.022	0.46	0.56
E	0.465	0.510	11.81	12.95
F	0.300	0.325	7.62	8.25
G	0.100 BSC	2.54 BSC		
J	0.156 BSC	3.96 BSC		
K	0.315	0.355	8.00	8.50
L	1.00 BSC	25.40 BSC		
N	0.165 BSC	4.19 BSC		
P	0.100 BSC	2.54 BSC		
Q	0.148	0.168	3.76	4.27
R	----	0.600	----	15.24
S	1.500 BSC	38.10 BSC		
U	0.200 BSC	5.08 BSC		
V	----	0.250	----	6.35
W	0.435	0.450	11.05	11.43
X	0.400 BSC	10.16 BSC		
Y	0.152	0.163	3.85	4.15

STYLE 2:
PIN 1: RF OUTPUT
2: GROUND
3: GROUND
4: DELETED
5: VDC
6: DELETED
7: GROUND
8: GROUND
9: RF INPUT

CASE 714Y-03
ISSUE D

Motorola reserves the right to make changes without further notice to any products herein. Motorola makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Motorola assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. "Typical" parameters which may be provided in Motorola data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. Motorola does not convey any license under its patent rights nor the rights of others. Motorola products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the Motorola product could create a situation where personal injury or death may occur. Should Buyer purchase or use Motorola products for any such unintended or unauthorized application, Buyer shall indemnify and hold Motorola and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that Motorola was negligent regarding the design or manufacture of the part. Motorola and are registered trademarks of Motorola, Inc. Motorola, Inc. is an Equal Opportunity/Affirmative Action Employer.

Mfax is a trademark of Motorola, Inc.

How to reach us:

USA/EUROPE/Locations Not Listed: Motorola Literature Distribution;
P.O. Box 5405, Denver, Colorado 80217. 1-303-675-2140 or 1-800-441-2447

JAPAN: Motorola Japan Ltd.; SPD, Strategic Planning Office, 141,
4-32-1 Nishi-Gotanda, Shinagawa-ku, Tokyo, Japan. 81-3-5487-8488

Customer Focus Center: 1-800-521-6274

Mfax™: RMFAX0@email.sps.mot.com – TOUCHTONE 1-602-244-6609
Motorola Fax Back System – US & Canada ONLY 1-800-774-1848
– http://sps.motorola.com/mfax/

ASIA/PACIFIC: Motorola Semiconductors H.K. Ltd.; 8B Tai Ping Industrial Park,
51 Ting Kok Road, Tai Po, N.T., Hong Kong. 852-26629298

HOME PAGE: <http://motorola.com/sps/>



MHW8185LR/D